Alonzo L. Plough, Ph.D, MPH, Director
Seattle-King County Department of Public Health

EPI-LOG

Communicable Disease and Epidemiology News
Published continuously since 1961
Edited by Sherry Lipsky, P.A.-C, M.P.H.

City of Seattle King County

Seattle-King County
Department of Public Health
Epidemiology
First Interstate Building
999 Third Avenue, Ste. 900
Seattle, WA 98104 - 4039

Return Service Requested

BULK RATE
U.S.Postage
PAID
Seattle, WA
Permit No. 1619

IN THE FEBRUARY 1999 ISSUE: **VOL 39, NO. 2**

Wound Botulism

The Seattle-King County Department of Public Health (SKCDPH) received a report this month of *Clostridium botulinum* cultured from a wound in a 29 year-old Hispanic male hospitalized for an abscess in his buttock, which he estimated had been present for three months. He was otherwise asymptomatic. The patient reported that he had injected heroin into his buttock. When interviewed by the Health Department (in Spanish), he stated that the heroin he used was black, but that he did not know of the term 'black tar heroin'.

Black tar heroin has been associated with cases of wound botulism, many involving subcutaneous injection or "skin popping" of the drug. (MMWR 1995;44(48):889-892).

Skin popping of heroin is common among chronic users who are either unable or reluctant to inject the drug intravenously. Spores of *C. botulinum*, which could contaminate the heroin, other substances with which the heroin is cut, or the liquid (usually water) with which the heroin is dissolved, are not destroyed by heating the heroin/liquid mixture. Spores inoculated into subcutaneous tissue, either from the drug or from the skin after inadequate skin disinfection, can germinate and produce toxin.

Wound botulism is characterized by acute onset of flaccid descending, symmetric paralysis, opthalmoplegia, ptosis, or other cranial nerve dysfunction, and is associated with a normal CSF protein level. A history of drug injection or a food history that does not identify a probable source for foodborne botulism should prompt consideration of wound botulism and elicitation of a thorough history and physical examination for evidence of cellulitis or abscess. Wounds containing *C. botulinum* may be small and initially unnoticed. Inspection of the intranasal septum and paranasal sinuses also may disclose a focus of *C. botulinum* infection in persons who snort cocaine.

Both risk for death and duration of hospitalization can be reduced by prompt administration of botulinal antitoxin. Antitoxin is not contraindicated in pregnancy. Wounds suspected of being contaminated with *C. botulinum* should be widely debrided and irrigated, ideally after the administration of the antitoxin. Penicillin, 10-20 million units per day, is considered the antibiotic of choice, although its efficacy has not been determined. Mechanical ventilation is the main supportive therapy for treatment of severe botulism.

If you suspect that a patient has botulism, please contact the SKCDPH immediately at 206-296-4774. We can arrange through the Washington State Department of Health to obtain botulinal antitoxin if it is indicated. The Centers for Disease Control and Prevention (CDC) also has a 24-hour hotline to answer questions from health care providers treating potential cases of botulism (404-639-2888).

Flu Vaccine and GBS

In 1993-1994, an increase in the number of influenza-vaccine-associated cases of Guillain-Barre Syndrome (GBS) was reported to the national Vaccine Adverse Event Reporting System (VAERS), from 37 in 1992-93 to 74 in 1993-94. Because the VAERS detects only numbers of vaccine-associated cases and not information on the number of persons at risk, a collaborative CDC-University of Maryland study was performed in order to determine if the 1993-94 influenza vaccine was associated with increased risk of GBS (Lasky et al. The Guillain-Barre Syndrome and the 1992-1993 and 1993-1994 influenza vaccines. *N Engl. J Med* 1998;339:1797-802).

Cases of GBS with onset during the months of September through February for the years 1992-93 and 1993-94 were identified in four states with a total population of 42.6 million adults (IL, MD, NC and WA) using hospital discharge data bases. Vaccination histories for GBS cases were obtained from providers. Vaccination-associated cases were defined as those having onset of GBS within six weeks of vaccination because prior studies established that all or almost all the elevated risk occurred in this time frame. Influenza vaccine coverage in the general population was estimated for the study periods using a telephone survey.

Influenza vaccination in the six weeks prior to onset of GBS was confirmed for 19 of 180 cases of GBS identified and with vaccination history available. Nine of the 19 patients had onset between days nine and 12 after vaccination. A controlled analysis estimated the risk of GBS to be increased by a factor of 1.7 in the six weeks after influenza vaccination. Based on the observed background incidence of non-vaccine-associated GBS, the authors conclude that an excess of 1.1 cases of GBS occurred per million vaccinations, with a maximum of 1.6 cases per million vaccinations. Vaccine-associated GBS was not observed among the 4 million recipients under 45 years of age.

The authors conclude that the increased numbers of vaccine associated-GBS reported to the VAERS were due to increased influenza vaccine coverage and an increase in the background rate of GBS, but not to an increase in vaccine-specific risk.

In contrast to the small risk of GBS after influenza vaccination, there are 20,000 to 30,000 excess deaths from influenza each year in the U.S. Because the risk of developing severe influenza complications such as pneumonia, hospitalization and death far outweighs the small risk of GBS associated with vaccine, influenza vaccine continues to be an important preventive health measure, especially for persons at high risk for complications. It is not too late to vaccinate high-risk

patients against influenza for the current flu season. For patients who have recovered from GBS or who have chronic inflammatory demyelinating polyneuropathy the safety of influenza immunization has not been established and decisions about immunization should be made on an individualized basis.

Additional information about influenza vaccine and GBS is available at the CDC National Immunization Program website: www.cdc.gov/nip/vacsafe/vaccinesafety.hottopics

HPV in Women

The human papillomavirus (HPV) may be sexually transmitted between women, according to a newly published study in the *Journal of Infectious Diseases* (1998;178). Dr. Jeanne M. Marrazzo, of the University of Washington, and colleagues studied 149 women, recruited from the community, who had had sex with at least one woman during the past year. Twenty-one subjects said that they had never had sex with a man, 93 reported no sex with a man in the past year, and 35 said they had had sex with at least one man during the past year.

Using a polymerase chain reaction assay, genital tract HPV DNA was detected in 45 subjects (30%), four of whom reported no prior sex with men. None of those in whom HPV DNA was detected gave a history of genital warts and only two reported known possible exposure to genital warts in a male partner. Among the 41 women who had HPV DNA who reported sex with men, 21 (51%) had not had sex with a male partner for greater than one year and in many cases for over 10 years. The sexual practices with female partners did not differ between women who had detectable HPV DNA and those who had no detectable HPV DNA.

In 133 subjects, the investigators assessed seroreactivity to HPV-6 and –16. They detected antibodies to one or both of the HPV types in 92 (69%) subjects. Antibodies to HPV were detected in 8 (42%) of 19 women reporting no prior sex with a man and in 84 (74%) of 114 women reporting prior sex with men (p=.16).

Thirteen women (6% of all subjects) had abnormal Pap smears. Three of these women reported no history of sex with men and three reported having had female sex partners with genital warts. Squamous intraepithelial lesions (SIL) were detected in six women; two of the women had never had sex with a man. HPV DNA was detected in five of the six women with SIL.

Furthermore, the study found that seven (33%) of 21 women who never had sex with a male partner reported having had fewer than two routine Pap smears in the preceding five years, compared with 1 (12%) of 128 women who had had sex with male partners during that time (p=.026). This finding is supported by other studies as well. Reasons cited in previous studies for reduced use of health care by lesbians, include the perception of alienating behavior on the part of health care providers, lack of health care coverage, self-perception of low risk for STDs and cervical cancer, and reduced need for birth control among women who have sex with women.

Nevertheless, this study suggests that Pap smear screening recommendations should not differ among women, whether or not they report having sex with men. Dr. Marrazzo is currently pursuing these findings in a larger study of STD, vaginitis, and cervical neoplasia in women who have sex with women and can be contacted for more information at 206-685-9850. The SKCDPH has recently initiated a program, Lesbian Health Matters, to promote cancer prevention in lesbians. Women in the community can contact the project by calling 1-800-756-5437. Health care providers can obtain more information, by contacting Dr. Marrazzo and Ms. Kathleen Stine at 206-720-4340, or Ellen Phillips-Angeles at 206-205-5679.

To Report: (area code 206)
AIDS 296-4645
Tuberculosis 731-4579
STDs..... 731-3954
Communicable Disease 296-4774
24-hr Report Line..... 296-4782
Disease Alert:
CD Hotline 296-4949
After hours 682-7321
http://www.metrokc.gov/health/

REPORTED CASES OF SELECTED DISEASES SEATTLE-KING COUNTY 1999

	CASES REPORTED IN JANUARY		CASES REPORTED THROUGH JANUARY	
	1999	1998	1999	1998
VACCINE-PREVENTABLE DISEASES				
Mumps	0	0	0	0
Measles	0	0	0	0
Pertussis	17	19	17	19
Rubella	2	0	2	0
SEXUALLY TRANSMITTED DISEASES				
Syphilis	6	0	6	0
Gonorrhea	95	74	95	74
Chlamydial infections	311	254	311	254
Herpes, genital	66	54	66	54
Pelvic Inflammatory Disease	22	35	22	35
Syphilis, late	2	0	2	0
ENTERIC DISEASES				
Giardiasis	16	12	16	12
Salmonellosis	17	10	17	10
Shigellosis	4	5	4	5
Campylobacteriosis	17	18	17	18
E.coli O157:H7	2	0	2	0
HEPATITIS				
Hepatitis A	8	44	8	44
Hepatitis B	2	10	2	10
Hepatitis C/non-A, non-B	1	0	1	0
AIDS	9	27	9	27
TUBERCULOSIS	12	10	12	10
MENINGITIS/INVASIVE DISEASE				
Haemophilus influenzae	0	0	0	0
Meningococcal disease	3	3	3	3